

CHAPTER 320
PROGRAM FOR ASSESSMENT OF WATER QUALITY BY
WATERSHED AND RIVER BASIN
§§320.1-320.9

§320.1. Purpose.

(a) The purpose of this chapter is to assess historical, existing and projected water quality conditions in order to meet the goals of maintaining and improving the quality of the state's water resources. Regional assessments of water quality shall be conducted pursuant to this chapter to provide the commission, river authorities and local governments with sufficient information to take appropriate corrective action necessary to meet these goals. The intent of developing water quality assessments in each watershed is to identify water quality problem areas and to focus resources and future studies on these areas. The commission has the responsibility of ensuring that a comprehensive assessment of water quality is conducted for each watershed in the state. Whenever feasible, the assessments will be the result of a cooperative partnership between river authorities, designated local governments, other political subdivisions, other state agencies and the Texas Water Commission. The assessments will be conducted in a manner which avoids, duplication of efforts among river authorities, the Texas Water Commission, other state agencies, local governments, other political subdivisions, and regulated entities. This program will be implemented in two phases, with the first phase focusing on information gathering, and the second phase requiring an evaluation and analysis of the information collected. Additionally, the regional assessment program is designed to allow citizens and private organizations an opportunity for involvement in protecting the state's water resources. It is not the intent of these rules to require river authorities and designated local governments to reproduce information already contained in the files of the commission, however, the performance of a meaningful water quality assessment may require existing information to be compiled in a format which will allow for a comprehensive evaluation of the information.

(b) It is the intent of these rules that the fees collected under this chapter recover no more than the actual costs of administering the new water quality management programs incurred by river authorities, designated local governments or the Texas Water Commission. Revenue generated by this chapter shall not be used by river authorities and designated local governments to fund their existing programs. The commission shall ensure that water users and wastewater dischargers do not pay excessive amounts; and that no municipality shall be assessed cost for any efforts that duplicate water quality management activities carried out pursuant to Texas Water Code, §26.177 or rules implementing that section.

§320.2. Applicability.

(a) The regional assessments of water quality apply to water in the state as defined in the Texas Water Code, §26.001(5).

(b) Regional assessments shall be conducted by river authorities, designated local governments or by the Texas Water Commission. The commission, either directly or through cooperative agreements and contracts with local governments, shall conduct regional assessments of watersheds where there is no river authority or where a river authority is unable to perform an adequate assessment of its own watershed.

(c) This chapter may be periodically revised following the evaluation of submitted regional assessments.

§320.3. Definitions and Abbreviations.

(a) Definitions. The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise:

(1) Aboveground storage tank - As defined in 31 Texas Administrative Code (TAC), §334.122(b)(1) of this title (relating to Definitions).

(2) Aquatic life - An indigenous species of aquatic or semi-aquatic life or wildlife.

(3) Assessment report - A comprehensive record of historical, existing and projected water quality conditions of a watershed.

(4) Citizen monitoring - A program conducted by students or other volunteers involving the collection, management and dissemination of environmental information.

(5) County baseline map - State Department of Highways and Public Transportation County Map in a digital format depicting site-specific locations in latitude and longitude coordinates.

(6) Designated local government - A local government that has been designated through cooperative agreement or contract with the commission to perform a regional assessment pursuant to this chapter.

(7) Element - A component and constituent of the regional assessment report.

(8) Leaking petroleum storage tank - Those storage tanks which have been assigned a leaking petroleum storage tank (LPST) number by the Texas Water Commission.

(9) Nonpoint source pollution - Human-made or human-induced pollution caused by diffuse sources that are not regulated as point sources, resulting in the alteration of the chemical, physical, biological and/or radiological integrity of the water.

(10) Outfall - A designated outfall pursuant to a commission issued discharge permit or NPDES permit.

(11) Permit - any right or authorization granted by the Texas Water Commission or its predecessor agencies, including wastewater disposal permits, water rights permits, certificates of adjudication and certified filings.

(12) Petroleum product - As defined in 31 TAC §334.122(b)(12) of this title (relating to Definitions).

(13) Pollution - The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(14) River authority (for purposes of this chapter only) - Any district or authority created by the legislature which contains an area within its boundaries of ten or more counties and which is governed by a board of directors appointed or designated in whole or in part by the governor, or by the Texas Water Development Board, including without limitation the San Antonio River Authority, and other river authority or special district created under Article III, Section 52, Subsection (b)(1) or (2), or Article XVI, Section 59, of the Texas Constitution that is designated by rule of the commission to comply with this chapter.

(15) River basins and coastal basins - The river basins and coastal basins now defined and designated by the Texas Water Development Board as separate units for the purposes of water development and inter-watershed transfers, and as they are made certain by contour maps on file in the offices of the Texas Water Development Board, including but not limited to the rivers and their tributaries, streams, water, coastal water, sounds, estuaries, bays, lakes and portions of them, as well as the lands drained by them.

(16) Solid waste - As defined in the Texas Solid Waste Disposal Act, §§361.003, as amended, including both municipal solid waste and industrial solid waste as those terms are defined in the Texas Solid Waste Disposal Act, §361.003, as amended.

(17) Stream segment - The term "segment" refers to the surface waters of an approved planning area exhibiting common biological, chemical, hydrological, natural, and physical characteristics and processes. Segments will normally exhibit common reactions to external stresses (e.g. discharge or pollutants). Segments are enumerated using a four digit number. The first two digits identify the basin in which the segment is located. The last two digits distinguish the segments within a particular river, coastal, or estuarine basin. Boundaries of bay and estuarine segments (identified with the number 24 as the first two digits) have not been precisely defined and are illustrated as approximations at this time. All designated segments are listed in Appendix A of §307.10 of this title (relating to Appendices A-D).

(18) Stormwater drainage system - Man-made and natural features which function as a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate, or divert stormwater runoff.

(19) Surface water - As defined in §307.3(a)(38) of this title (relating to Definitions and Abbreviations).

(20) Superfund site - Any facilities identified in the State Registry pursuant to the Texas Health and Safety Code, §361.181, or on the National Priorities List pursuant to the Comprehensive Environmental Response Compensation and Liability Act, 42 United States Code §9601 et seq., as amended.

(21) Toxic materials - Any liquid, gaseous, or solid substance or substances in a concentration which, when applied to, discharged to, or deposited in the waters in the state, may exert a poisonous effect detrimental to man or to the propagation, cultivation or conservation of animals, fish, or other aquatic life.

(22) Unclassified waters - Those waters for which no classification has been assigned and which have not been identified in Appendix A of §307.10.

(23) Underground storage tank - As defined in §334.2 of this title (relating to Definitions).

(24) Wetlands - As defined in 31 TAC §307.3(a)(45).

(25) Work plan - A document outlining the proposed scope of work, including a time schedule and cost expenditures, from the river authority or designated local government to perform a service and/or provide a comprehensive regional assessment of the watershed.

(b) Abbreviations. The following abbreviations apply to this chapter:

- (1) Assessment - Regional assessment of water quality to be performed biennially
- (2) AST - Aboveground storage tank.
- (3) Code - Texas Water Code.
- (4) Commission - Texas Water Commission.
- (5) CWA - Clean Water Act.
- (6) EPA - Environmental Protection Agency.
- (7) LPST - Leaking petroleum storage tank.
- (8) NPDES - National pollutant discharge elimination system.
- (9) TAC - Texas Administrative Code.

- (10) UST - Underground storage tank.

§320.4. Overview.

The purposes stated in §320.1 of this title (relating to Purpose) shall be carried out by the performance of regional assessments of water quality within each watershed. The results of the assessments shall be provided to the governor, commission and Texas Parks and Wildlife Department in biennial regional assessment reports. Each assessment shall include a work plan, draft assessment report and final assessment report. In conducting the assessments, river authorities, designated local governments and the commission shall create steering committees to assist in the coordination and development of the assessment reports. Additionally, these entities shall develop a public input process that provides for meaningful comments and review by private citizens and organizations on the regional assessments and reports.

§320.5. Assessment Reports and Work Plans.

(a) Work plans. The work plan shall set forth in detail how the river authority or designated local government proposes to develop the assessment as required by this chapter. The work plan shall contain, at a minimum, the following:

- (1) an introduction or summary of the work plan;
- (2) a water quality needs assessment, a problem statement and any proposed solutions to address the problems;
- (3) main water quality objectives of the assessment;
- (4) the proposed methods or activities to be utilized in preparing the assessment. This shall include, but shall not be limited to, a list of existing information and sources to be used and any proposed new data or analyses to be produced;
- (5) a proposed budget, including an estimate of the costs which will be incurred in preparing the assessments for each year from 1992 through 1995. The budget should indicate whether any match of in-kind services will be provided by the river authority or designated local government and whether the river authority or designated local government proposes to use existing staff, hire new staff, or contract out to perform the assessment;
- (6) a schedule outlining the major completion dates of the activities and methods to be utilized in conducting the assessment. These dates shall be depicted on a time-line chart; and
- (7) a prioritization of the assessment elements, as identified in §320.6(b) of this title (relating to Elements of Assessment Reports).

(b) Assessment reports. The purpose of the assessment reports is to present in a comprehensive format the results of the biennial regional assessments of water quality. The reports

shall address significant water quality problems facing the watershed. Additionally, the reports shall focus on projected water quality conditions. The assessment reports shall be prepared in accordance with these rules. It is contemplated by these rules that the amount of detail in each biennial report will vary according to the time allowed for preparation, the resources available, the complexity of the issues facing the watershed, and the amount of input received by the river authority or designated local government from other local governments and individuals.

(1) Each river authority or designated local government has the discretion to determine the extent to which a particular element needs to be discussed in the assessment report. Where the items required to be addressed in a particular element relate to things which do not present a threat of contamination to water quality in a watershed, the river authority or designated entity may so state, provide the reasons for that determination, and a brief description of the evaluation, data, analyses or other pertinent methods or information used to reach the decision.

(2) Any conclusions in the assessment reports that have been drawn by river authorities and designated local governments shall be supported by data, evaluations and other factual information. When necessary, the commission may require additional data collection as part of the overall assessment process.

(c) Time of performance. The work plans and assessment reports shall be prepared in accordance with the following time schedule:

(1) January 31 of 1992: submittal of first year work plans to commission.

(2) January 31 of odd-numbered years: submittal of work plans to commission.

(3) July 1 of even-numbered years: submittal of draft regional assessment reports to commission.

(4) October 1 of even-numbered years: submittal of final version of regional assessment reports to governor, Texas Parks and Wildlife Department, and commission.

§320.6. Elements of Assessment Reports.

(a) General requirements. The assessment reports shall be evaluated and organized by stream segment. Unclassified surface waters shall be grouped with the first downstream segment in the same watershed. All data and information maintained by the commission and pertinent to the completion of this §320.6 of this title (relating to Elements of Assessment Reports) will be assembled by the commission and disseminated to those entities conducting regional assessments of water quality as required by this chapter.

(1) Baseline maps shall be either a basin-wide surface water map, a basin-wide groundwater map or county map. If necessary, a larger-scaled map than the county baseline map may be used, such as the 7.5 minute (1:24,000 scale) United States Geological Survey (U.S.G.S.) quadrangle series maps.

(2) All assessment report elements, as identified under subsection (b) of this section, requiring a site-specific location (e.g. locations of municipal and industrial wastewater discharges, superfund sites, etc.) shall be depicted on maps with symbols indicating type of assessment element along with a unique identification number for the element. The sites' longitudinal and latitudinal coordinates with attributes (e.g. latitude, longitude, source map name, source scale and positional reliability estimate-code) sufficient to identify individual assessment elements shall be provided in an ASCII flat file format and placed on micro computer disks to be submitted to the commission. These files shall be consistent with the commission's computer database software, database format and geographical information system for a suitable importation of data.

(b) Specific elements to be addressed:

(1) a review of historic and current water quality monitoring data, to include the following:

(A) brief description and status of water quality monitoring programs currently being conducted by the authority, other political subdivisions and other agencies;

(B) evaluation of the capability of existing monitoring programs to adequately assess and analyze existing and potential water quality problems in the watershed;

(C) specific recommendations for additional monitoring and data management needed to conduct future regional assessments;

(D) monitoring plan which describes how the river authority will implement recommendations for additional monitoring in coordination with the commission;

(E) brief description of any monitoring to analyze nonpoint source loadings;
and

(F) depiction of all existing and proposed monitoring sites on a county baseline map or other appropriate map.

(2) the river authority or designated local government shall formulate goals and objectives that encourage and promote citizen monitoring activities. Additionally, the river authority or designated local government shall discuss existing citizen monitoring programs and any measures taken by the river authority and local government to implement citizen monitoring programs;

(3) any measures taken by river authorities, cities, and others to promote public awareness of water quality issues and the opportunity for public involvement in water quality issues;

(4) existing population figures for political subdivisions. Sources for population may be obtained through the Texas Water Development Board, Texas Population Totals/Bureau of the Census, Department of Commerce, Texas Natural Resources Information System and records of political subdivisions within the watershed;

(5) a basin-wide surface water baseline map of Texas depicting all segments, significant waterways, lakes, reservoirs, wetlands, and significant geographical features such as: city and county boundaries, and major roadways in a digital format in latitude and longitude coordinates;

(6) a basin-wide groundwater baseline map depicting all minor and major aquifers, and significant geographical features such as: city and county boundaries, and major roadways in a digital format in latitude and longitude coordinates;

(7) an identification and evaluation of wells which could lead to pollution of water in the state (e.g. abandoned and/or improperly plugged domestic drinking water wells, oil and gas wells, but not active or properly plugged wells, including groundwater monitoring wells, test wells, or recovery wells). Depiction of the identified well or field location on a county baseline map;

(8) an inventory of permitted municipal wastewater disposal activities by:

(A) name of permittee and permit number;

(B) date of permit expiration and status of operations, (e.g. active, inactive, facility not constructed);

(C) brief description of facility operations (e.g. domestic wastewater treatment plant, dairy) and treatment processes;

(D) effluent limits (BOD_5 /TSS/ NH_3 -N/DO) and any other parameters listed in the permit;

(E) effluent set in lbs/day;

(F) for agricultural facilities, estimated amount of waste produced (solids in lbs/day and liquid in gallons/day); maximum number of animals allowed under permit;

(G) permitted daily average flow;

(H) number/year of water quality related permit violations based on self-reporting data; and

(I) depiction of all permitted municipal facilities' discharge points on a county baseline map or other appropriate map.

(9) an inventory of permitted industrial wastewater disposal activities by;

(A) name of permittee and permit number;

(B) date of permit expiration and status of operations (e.g. active, inactive, facility not constructed);

(C) brief description of facility operations (e.g. steam electric station, organic chemical manufacturing plant) and treatment processes (e.g. disposal method such as surface water discharge, subsurface disposal or, if land disposal, include specific method such as irrigation, evaporation);

(D) effluent limits listed in the permit either in lbs/day or concentration based;

(E) permitted daily average flow;

(F) number/year of water quality related permit violations based on self-reporting data; and

(G) depiction of all permitted discharge points on a county baseline map or other appropriate map;

(10) an inventory of stormwater permits, as defined in the Clean Water Act of 1987 §402(p), (added by of the Water Quality Act of 1987 §405), 40 Code of Federal Regulations Parts 122, 123, and 124, by:

(A) name of permittee and permit number;

(B) date of permit expiration and status of operations, (e.g. active, inactive, not constructed);

(C) publicly owned conveyances;

(D) privately owned conveyances;

(E) parameters listed in the permit;

(F) proposed stormwater pollution control;

(G) number/year of water quality related permit violations based on self-reported data; and

(H) depiction of all permitted stormwater monitoring outfall sites on a county baseline map or other appropriate map.

(11) an inventory of water rights permits (as defined in §320.3(a) of this title (relating to Definitions and Abbreviations)) to include, as applicable:

(A) name of permittee and permit number;

(B) date of permit expiration and status of operations (e.g. active or dormant);

- second;
- (C) authorized diversion rate in gallons per minute or cubic feet per
 - (D) authorized annual use limit in acre-feet per year;
 - (E) authorized storage in acre-feet per year;
 - (F) indication of whether storage is on or off channel;
 - (G) type of use (e.g. municipal, industrial, irrigation, recreation);
 - (H) indication of whether permittee is a water supplier. If water rights holder is a supplier, list supplier's customers and locations of customers;
 - (I) depiction of all diversion points on a county baseline map or other appropriate map.

(12) an inventory of solid waste management facilities and superfund sites to include the following, as applicable:

- (A) name of permittee;
- (B) hazardous waste permit number;
- (C) solid waste registration number;
- (D) solid waste management activities conducted at the site; and
- (E) depiction of all solid waste management facilities or superfund sites on a county baseline map or other appropriate map. Distinguish federal and state superfund sites on the county baseline map or other appropriate map.

(13) an inventory by segment of those ASTs and USTs regulated by the Commission pursuant to the Texas Water Code, Chapter 26 and the commission rules in 31 TAC Chapter 334, including:

- (A) total number of ASTs and USTs in each segment;
- (B) total number of LPSTs in each segment;
- (C) storage tank registration numbers and location by street or other identifying address;
- (D) LPST registration numbers and location by street or other identifying address; and

(E) location by street or identifying address of any known ASTs or USTs not registered with the commission.

(14) identification and evaluation of on-site disposal facilities which could lead to pollution of water in the state (e.g. surface failure, reported complaint regarding on-site disposal facility). Depiction of the identified facilities or location of subdivision served by on-site disposal facilities on a county baseline map.

(15) identification and documentation of existing or potential water quality problems caused by toxic materials that could adversely impact human health, aquatic life, wildlife, or livestock; and an evaluation and analysis of the sources of toxic substances which contribute to each water quality problem identified. Depiction on a county baseline map the waters impacted by toxic materials and identification of the contaminant and possible sources of pollution if known.

(16) an evaluation and analysis of the health and integrity of aquatic life based on sampling data for fish, benthic invertebrates, and any other forms of aquatic life which may be of concern; identification of existing or potential conditions and sources of pollution which adversely impact aquatic life, and identification of threatened or endangered species which could be affected by diminished water quality.

(17) sources of significant nonpoint source pollution shall be discussed in the assessment report and depicted on a county baseline map or other appropriate map. Land use maps shall be developed for areas where nonpoint source pollution has been identified as a threat to water quality. Best professional judgment shall be utilized in determining an appropriate scale for the land use maps.

(18) identification and documentation of existing or potential water quality problems or impediments to uses caused by excessive growth of aquatic vegetation, and an evaluation of the factors contributing to the water quality problem identified.

(19) identification and documentation of existing or potential water quality problems caused by other forms of pollution - such as oxygen-demanding organic materials, excessive particulate materials (suspended solids), elevated levels of dissolved salts, or elevated levels of bacterial indicators of fecal contamination; and an evaluation and analysis of the sources which contribute to each water quality problem identified.

(20) an evaluation of existing and proposed methods for collection and disposal of household waste, pesticides and toxic agricultural products in the watershed. The river authority or designated local government shall formulate basin-wide goals and objectives for use in the watershed to promote and encourage the development of such programs. The river authority or designated local government shall identify their perceived role in promoting these programs.

(21) identification of issues or instances where enforcement of water quality regulations by federal, state or local governments is inadequate or has failed to correct water quality problems. The river authority or designated local government shall also identify water quality issues

which are not adequately addressed as a result of the lack of authority on the part of state or local governments or which may be adequately addressed if the Commission's authority could be delegated. The river authority or designated local government is encouraged to suggest possible solutions to any problems identified under this subsection, including the need for legislative action.

(22) a description of federal, state and local programs and/or actions that are attempting to respond to identified water quality problems.

(23) any other water quality problems not previously identified pursuant to this section of the rule.

(24) the regional assessment report shall contain a brief narrative discussing those waterbodies that are of water quality concern. This should include, but not be limited to, the identification of high quality waters as well as waterbodies not meeting water quality standards. The regional assessment report shall also describe possible solutions to any identified water quality concerns and estimated costs to implement such solutions. A prioritization of waters with existing or potential water quality problems.

(25) a bibliography of previous water quality studies performed in the watershed.

(26) a description of goals and objectives that encourage, assist and promote water conservation measures and water conservation management plans. A discussion of existing water conservation programs and any measures taken by river authorities and local governments to implement water conservation programs.

§320.7. Responsibilities of River Authorities and Designated Local Governments.

(a) Steering committees. River authorities, designated local governments and the commission shall organize and lead basin-wide steering committees. The membership of the steering committees shall reflect a diversity of interests. The committees shall be comprised of appropriate state agencies (for example, Texas Parks and Wildlife Department, General Land Office, Texas Department of Health, Texas Department of Agriculture, State Department of Highways and Public Transportation, Texas Water Commission, Texas Water Development Board, Texas State Soil and Water Conservation Board, and Texas Railroad Commission), political subdivisions, other governmental bodies and individuals or entities with an expressed interest in water quality matters within each watershed.

(1) Size of committees. The steering committee should not be so small as to be unrepresentative, or so large as to become unmanageable. The size of the committee should be determined on a case-by-case basis by the complexity of the job to be done and the number of interested individuals.

(2) Meetings. A regular schedule of committee meetings should be established as soon as possible. Meetings should be held as needed, and should have an agenda. River authorities are

encouraged to involve the committee in the work plan process, as described in §320.5 of this title (relating to Assessment Report and Work Plans).

(b) Public participation. River authorities, designated local governments and the commission shall develop a public input process that provides for meaningful comments and review by private citizens and organizations.

(c) Designated local governments. Where appropriate, the commission shall designate a local government to perform a regional assessment pursuant to this chapter. When this designation occurs, the designated local governments shall comply with the requirements of this chapter.

(d) General responsibilities. The river authority or designated local government shall be responsible for the professional quality, timely completion, and coordination of all drawings, maps, assessment reports, and other services required to be furnished by the river authority or designated local government under this chapter. The commission may require the river authority or designated local government to correct or revise any errors, omissions or other deficiencies in any assessment report or services provided by the river authority or designated local government to ensure that such assessment reports and services fulfill the purposes of this chapter.

(e) Distribution of report. The river authority or designated local government shall be responsible for the printing of all assessment reports and maps required by this chapter. The river authority or designated local government shall provide, at a minimum, twenty-five (25) copies of each to the commission and shall provide sufficient copies for distribution and review under the river authority's or designated local government's public participation program and steering committee to fulfill the purposes of this chapter.

§320.8. Local Government Responsibilities.

(a) Local government responsibilities. It shall be the responsibility of local governments to assist the river authority or designated local government within the watershed in conducting the regional assessment by providing data and other relevant water quality information that pertains to the watershed.

(b) Coordination. All local governments within the same watershed should cooperate with river authorities, designated local governments and the commission in preparing the assessment reports.

§320.9. Basin-wide Steering Committee Members' Responsibilities.

(a) The committee's role is advisory in nature. Each committee member shall assist in identifying significant water quality issues within the watershed.

(b) All agencies and organizations participating in the steering committees shall provide, as available, relevant water quality data to the river authorities, designated local governments, or Texas Water Commission, as appropriate.